



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/089,222      | 07/19/2002  | Egbert Muller        | MERCK 2403          | 2488             |

23599 7590 04/02/2004

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.  
2200 CLARENDON BLVD.  
SUITE 1400  
ARLINGTON, VA 22201

EXAMINER

THERKORN, ERNEST G

ART UNIT PAPER NUMBER

1723

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/089,222

Applicant(s)

MULLER ET AL.

Examiner

Ernest G. Therkorn

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1723

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiebush (EP 366,252) in view of Nakaniski (WO 95/03256). At best, the claims differ from Fiebush (EP 366,252) in reciting use of a column shaped moulding, a flat moulding, and mesopores and macropores of a particular diameter. Nakaniski (WO 95/03256) (page 2, lines 19-21 and page 4, lines 5-9) discloses use of a column shaped moulding overcomes the high flow resistance of beads. Nakaniski (WO 95/03256) (page 10, lines 19-21) discloses use of a flat sheet allows a moulding to be used for thin layer chromatography. Nakaniski (WO 95/03256) (page 4, lines 17-24 and page 10, lines 32-page 12, line 4) discloses the mesopores and macropores of the recited diameter provide a good balance between strength and chromatographic properties. It would have been obvious to use a column shaped moulding in Fiebush (EP 366,252) because Nakaniski (WO 95/03256) (page 2, lines 19-21 and page 4, lines 5-9) discloses use of a column shaped moulding overcomes the high flow resistance of beads. It would have been obvious to use a flat moulding in Fiebush (EP 366,252) because Nakaniski (WO 95/03256) (page 10, lines 19-21) discloses use of a flat sheet allows a moulding to be used for thin layer chromatography. It would have been obvious to use mesopores and macropores in Fiebush (EP 366,252) because the mesopores and

macropores of the recited diameter because Nakaniski (WO 95/03256) (page 4, lines 17-24 and page 10, lines 32-page 12, line 4) discloses the mesopores and macropores of the recited diameter provide a good balance between strength and chromatographic properties.

The remarks urge that there is no suggestion to use Nakaniski (WO 95/03256)'s material in Fiebush (EP 366,252). However, Nakaniski (WO 95/03256) (page 2, lines 19-21 and page 4, lines 5-9) discloses use of a column shaped moulding overcomes the high flow resistance of beads. Nakaniski (WO 95/03256) (page 10, lines 19-21) discloses use of a flat sheet allows a moulding to be used for thin layer chromatography. Nakaniski (WO 95/03256) (page 4, lines 17-24 and page 10, lines 32-page 12, line 4) discloses the mesopores and macropores of the recited diameter provide a good balance between strength and chromatographic properties. Motivation exists to use Nakaniski (WO 95/03256)'s column shaped moulding in Fiebush (EP 366,252) because Nakaniski (WO 95/03256) (page 2, lines 19-21 and page 4, lines 5-9) discloses use of a column shaped moulding overcomes the high flow resistance of beads. Motivation exists to use Nakaniski (WO 95/03256)'s flat moulding in Fiebush (EP 366,252) because Nakaniski (WO 95/03256) (page 10, lines 19-21) discloses use of a flat sheet allows a moulding to be used for thin layer chromatography. Motivation exists to use Nakaniski (WO 95/03256)'s mesopores and macropores in Fiebush (EP 366,252) because the mesopores and macropores of the recited diameter because Nakaniski (WO 95/03256) (page 4, lines 17-24 and page 10, lines 32-page 12, line 4) discloses the mesopores and macropores of the recited diameter provide a good

Art Unit: 1723

balance between strength and chromatographic properties. This is particularly true where Fiebush (EP 366,252) on page 5, lines 5-7 prefers silica because using silicas that have a more uniform pore structure, the properties of the templated resin become more predictable and Nakaniski (WO 95/03256) on page 22, lines 19-21 discloses the volume and size of his macropores are precisely controlled.

The remarks urge patentability based upon the allegation that Nakaniski (WO 95/03256) has limited diffusion. However, Nakaniski (WO 95/03256) discloses on page 7, lines 14-21) that he has greater diffusion than ordinary gels because a large fraction of fine pores are restricted only two-dimensionally and on page 10 lines 27-29 discloses that compared to conventional columns his flow resistance is very low.

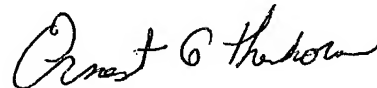
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is (703) 872-9306.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1723**

EGT  
March 30, 2004